

**FEDERAL AVIATION ADMINISTRATION  
FLIGHT STANDARDS SERVICE  
RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE**

**TITLE 14 CFR PART 97.33**

Bearings, headings, courses, tracks and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated.  
Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or feet RVR.

|                                  |                                  |  |   |                            |                           |
|----------------------------------|----------------------------------|--|---|----------------------------|---------------------------|
| <u>AIRPORT</u><br>PIERRE RGNL    | <u>AIRPORT ID</u><br>KPIR        | <u>PROCEDURE NAME</u><br>RNAV (GPS) RWY 25       | <u>ORIGINAL/AMENDMENT</u><br>2A           | <u>CITY</u><br>PIERRE      | <u>STATE</u><br>SD        |
| <u>AIRPORT ELEVATION</u><br>1744 | <u>TDZE</u><br>1725              | <u>SUPERSEDED</u><br>RNAV (GPS) RWY 25           | <u>ORIGINAL/AMENDMENT</u><br>2            | <u>DATED</u><br>08/30/2007 | <u>MAG VAR</u><br>8E      |
| <u>FACILITY</u><br>RNAV          | <u>COORDINATES OF FACILITIES</u> | <u>ACTUAL EFFECTIVE DATE</u><br>25 FEBRUARY 2021 | <u>REQUIRED EFFECTIVE DATE</u><br>ROUTINE | <u>CANCEL/SUSPEND</u>      | <u>EPOCH YEAR</u><br>2000 |

**TERMINAL ROUTES**

| FROM                  | FIX TYPE | TO                    | FIX TYPE | LEG TYPE | FO/FB | RNP  | COURSE | DISTANCE | ALTITUDE |
|-----------------------|----------|-----------------------|----------|----------|-------|------|--------|----------|----------|
| PIR VORTAC            |          | HIWRE                 |          | TF       | FO    | 1.00 | 062.66 | 6.84     | 4000     |
| ELREE                 |          | AMYOK                 |          | TF       | FB    | 1.00 | 282.75 | 29.46    | 4000     |
| LIVVA                 |          | DOKXE                 |          | TF       | FB    | 1.00 | 229.99 | 25.07    | 4000     |
| AMYOK                 | IAF      | HIWRE                 | NOPT     | TF       | FB    | 1.00 | 339.38 | 6.00     | 4000     |
| DOKXE                 | IAF      | HIWRE                 | NOPT     | TF       | FB    | 1.00 | 159.34 | 6.00     | 4000     |
| HIWRE                 | IF/IAF   | OPPOV                 |          | TF       | FB    | 1.00 | 249.36 | 6.11     | 3500     |
| OPPOV                 | FAF      | BEYAK/2.20 NM TO RW25 |          | TF       | FB    | 0.30 | 249.27 | 3.19     |          |
| BEYAK/2.20 NM TO RW25 |          | RW25                  | MAP      | TF       | FO    | 0.30 | 249.27 | 2.20     |          |
| RW25                  | MAP      | 1975 MSL              |          | CA       |       |      | 249.27 |          |          |
| 1975 MSL              |          | HOSTR                 |          | DF       | FO    | 1.00 |        |          | 4000     |

**MISSED APPROACH**

**MAP:**

LPV: DA  
LNAV/VNAV: DA  
LNAV: RW25

**MISSED APPROACH INSTRUCTIONS:**

CLIMB TO 4000 DIRECT HOSTR AND HOLD.

**ALTERNATE MISSED APPROACH INSTRUCTIONS:**



**PROFILE:**

- 1. **PT**      **SIDE OF COURSE**                      **OUTBOUND**                      **FT WITHIN**                      **MILES OF (IAF)**
- 2. HOLD E HIWRE, RT, 249.36 INBOUND, 4000 FT. IN LIEU OF PT (IAF), MAX 10000.
- 3. **FAC:** 249.27      **FAF:** OPPOV                      **DIST FAF TO MAP:** 5.39                      **DIST FAF TO THLD:** 5.39
- 4. **MIN ALT:** HIWRE 4000, OPPOV 3500, BEYAK/2.20 NM TO RW25 2440\*
- 5. **DIST TO THLD FROM OM:**                      **MM:**                      **IM:**                      **150 HAT:**                      **250 HAT:** 0.67                      **GS ANT:**
- 6. **MIN GP INCPT:** 3500                      **GP ALT AT FAF :** OPPOV 3500                      **OM:**                      **MM:**                      **IM:**
- 7. **GP ANGLE:** 3.00                      **34:1:** IS CLEAR                      **20:1:** IS CLEAR                      **TCH:** 53.7
- 8. **MSA FROM:** RW25 4200

**PBN REQUIREMENTS NOTE:**

RNP APCH.

**NOTES:**

CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -26°C OR ABOVE 54°C.  
 CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON PIR VORTAC AIRWAY RADIALS 341 CW 151.  
 CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT LIVVA ON V263 NORTHEAST BOUND.  
 CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT ELREE ON V120 SOUTHEAST BOUND.

**ADDITIONAL FLIGHT DATA:**

CHART CIRCLING ICON.  
 CHART VDP AT 1.33 NM TO RW25\*  
 \*LNAV ONLY  
 WAAS CHANNEL #63104  
 REFERENCE PATH ID: W25A  
 CHART FAS OBST: 1919 TREE 442352N/1001632W.  
 2079 AAO 442512N/1000853W.  
 HOLD W, RT, 068.98 INBOUND  
 LTP HAE: 495.5 M

**MINIMUMS:**

TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT

**ALTERNATE:** NA  STANDARD - CAT D 800-2 1/4

| CATEGORY:    | A          |        |     | B       |        |     | C       |        |     | D       |        |     | E       |        |     |         |
|--------------|------------|--------|-----|---------|--------|-----|---------|--------|-----|---------|--------|-----|---------|--------|-----|---------|
|              | FINAL TYPE | DA/MDA | VIS | HAT/HAA | DA/MDA | VIS | HAT/HAA | DA/MDA | VIS | HAT/HAA | DA/MDA | VIS | HAT/HAA | DA/MDA | VIS | HAT/HAA |
| LPV DA       | 1975       | 1      | 250 | 1975    | 1      | 250 | 1975    | 1      | 250 | 1975    | 1      | 250 |         |        |     |         |
| LNAV/VNAV DA | 2179       | 1 3/4  | 454 | 2179    | 1 3/4  | 454 | 2179    | 1 3/4  | 454 | 2179    | 1 3/4  | 454 |         |        |     |         |
| LNAV MDA     | 2180       | 1      | 455 | 2180    | 1      | 455 | 2180    | 1 1/4  | 455 | 2180    | 1 1/2  | 455 |         |        |     |         |
| CIRCLING     | 2240       | 1      | 496 | 2300    | 1      | 556 | 2400    | 1 3/4  | 656 | 2460    | 2 1/4  | 716 |         |        |     |         |



**CHANGES - REASONS**

1. ADDED "RNP APCH" TO PBN REQUIREMENTS NOTE - IAW 8260.19H PARA 8-6-8 B(1).
2. DELETED CHART NOTE: "DME/DME RNP-0.3 NA" - IAW 8260.19H PARA 8-6-8 B(1).
3. CHANGED CHART NOTE: FROM "FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -18°C (0°F) OR ABOVE 45°C (113°F)" TO "FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -26°C OR ABOVE 54°C" - IAW 8260.19 8-6-9S; USED UPDATED 5 YR HISTORY FROM RNAV GPS RWY 31, AMDT 1.
4. UPDATED PLANVIEW NOTE: FROM "PROCEDURE NA FOR ARRIVALS AT PIR VORTAC VIA V26 WESTBOUND AND VIA V561 SOUTHBOUND" TO "PROCEDURE NA FOR ARRIVAL ON PIR VORTAC AIRWAY RADIALS 341 CW 151" - TURNS EXCEED 90 DEGREES.
5. ADDED PLANVIEW NOTES: "PROCEDURE NA FOR ARRIVALS AT LIVVA ON V263 NORTHEAST BOUND" AND "PROCEDURE NA FOR ARRIVALS AT ELREE ON V120 SOUTHEAST BOUND" - TURNS EXCEED 90 DEGREES.
6. ADDED ADDL FLIGHT DATA NOTE: CHART CIRCLING ICON - IAW 8260.3 CHAPTER 2; NEW CIRCLING CRITERIA APPLIED.
7. UPDATED ADDITIONAL FLIGHT DATA REMARK FROM "CHART 2079 AAO 442512N/1000853W" TO "2079 AAO 442512N/1000853W" - 8260.19 8-6-10C, AAOS ARE NOT CHARTED.
8. CHANGED ALTERNATE MINIMUMS FROM STANDARD TO STANDARD - CAT D 800-2 1/4 - CIRCLING CAT D VIS INCREASED FROM 2 TO 2 1/4.
9. CHANGED CAT B CIRCLING HAA/MDA FROM 496/2240 TO 556/2300 - NEW CIRCLING CRITERIA APPLIED; APPLIED CIRCLING OBS FROM ILS OR LOC RWY 31, AMDT 13.
10. CHANGED CAT C CIRCLING HAA/MDA/VIS FROM 516/2260/1 1/2 TO 656/2400/1 3/4 - NEW CIRCLING CRITERIA APPLIED; VIS CHECK.
11. CHANGED CAT D CIRCLING HAA/MDA/VIS FROM 556/2300/2 TO 716/2460/2 1/4 - NEW CIRCLING CRITERIA APPLIED; APPLIED CIRCLING OBS FROM ILS OR LOC RWY 31, AMDT 13; VIS CHECK.
12. LTP/FTP LAT/LONG CHANGED FROM 442323.7015N/1001625.2210W TO 442323.6975N/1001625.2255W - UPDATED AIRPORT/RUNWAY AIRNAV DATA AND TARGETS EVALUATION.
13. FPAP LAT/LONG CHANGED FROM 442303.9100N/1001826.3700W TO 442303.9095N/1001826.3745W - UPDATED AIRPORT/RUNWAY AIRNAV DATA AND TARGETS EVALUATION.
14. CRC REMAINDER CHANGED FROM 4421E5C7 TO 70FBC6DA - LTP AND FPAP LOCATIONS CHANGED.
15. CHANGED ADDITIONAL PATH POINT RECORD INFORMATION: LTP ORTHOMETRIC HEIGHT/FPAP ORTHOMETRIC HEIGHT FROM +05189 TO +05190 - UPDATED AIRPORT/RUNWAY AIRNAV DATA.
16. ADDED MAX HOLDING 10000 TO PROFILE LINE 2 - MAX ALLOWABLE PER PATTERN SIZE.

**COORDINATED WITH:**

A4A  ALPA  AOPA  APA  HAI  NBAA  OTHER: ZMP, AMGR

**FLIGHT CHECKED BY**

GABRIEL J PARKISON

*Digitally signed by* **OFFICE**

**WARDELL HENNING** FICO

Jun 12, 2020

**DATE**

6/10/2020

**DEVELOPED BY**

WARDELL HENNING (PATRICK COMBS)

*Digitally signed by*

**WARDELL HENNING**

Jun 12, 2020

**OFFICE**

AJV-A432

**DATE**

02/14/2020

**APPROVED BY**

GEORGE DAVIS

*Digitally signed by*

**WARDELL HENNING**

Jun 12, 2020

**OFFICE**

AJV-A430

**DATE**

**TITLE  
MANAGER**



FAS DATA BLOCK INFORMATION

| <u>DATA FIELD</u>                        | <u>DATA</u>   |
|--|---------------|
| OPERATION TYPE                           | 0             |
| SBAS SERVICE PROVIDER IDENTIFIER         | 0             |
| AIRPORT IDENTIFIER                       | KPIR          |
| RUNWAY                                   | RW25          |
| APPROACH PERFORMANCE DESIGNATOR          | 0             |
| ROUTE INDICATOR                          |               |
| REFERENCE PATH DATA SELECTOR             | 0             |
| REFERENCE PATH IDENTIFIER (APPROACH ID)  | W25A          |
| LTP/FTP LATITUDE                         | 442323.6975N  |
| LTP/FTP LONGITUDE                        | 1001625.2255W |
| LTP/FTP ELLIPSOIDAL HEIGHT               | +04955        |
| FPAP LATITUDE                            | 442303.9095N  |
| FPAP LONGITUDE                           | 1001826.3745W |
| THRESHOLD CROSSING HEIGHT (TCH)          | 00053.7       |
| TCH UNITS SELECTOR (METERS OR FEET USED) | F             |
| GLIDEPATH ANGLE (GPA)                    | 03.00         |
| COURSE WIDTH AT THRESHOLD                | 106.75        |
| LENGTH OFFSET                            | 0656          |
| HORIZONTAL ALERT LIMIT (HAL)             | 40.0          |
| VERTICAL ALERT LIMIT (VAL)               | 50.0          |
| <br>                                     |               |
| CRC REMAINDER                            | 70FBC6DA      |

ADDITIONAL PATH POINT RECORD INFORMATION

|                         |        |
|-------------------------|--------|
| ICAO CODE               | K3     |
| LTP ORTHOMETRIC HEIGHT  | +05190 |
| FPAP ORTHOMETRIC HEIGHT | +05190 |

